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Remarks

Claims 1-4, 7-8, 13-22, 25-35, 38-40 and 45-46 are pending. Claims 5-6, 9-12, 23-24, 36-37, 41-44 and 47-50 are canceled in this Response.

Objection to the Information Disclosure Statement Filed March 27, 2006

A concise explanation of the relevance of foreign language references JP59-89462 and JP3-121588, as presently understood, is attached to this response in the form of a brief explanation of each reference prepared by Okuyama & Co as part of its report to Hewlett-Packard Company on an Office Action in the Japanese counterpart to this application. The Examiner is, therefore, requested to consider JP59-89462 and JP3-121588 in the examination of this application.

Objection to the Specification

The Specification has been amended to correct the informality noted in paragraph 2 of the Office Action.

Claim Amendments

The claims have been amended to more clearly recite novel features. The claims now include the pattern from which the frequency of electromagnetic radiation is sensed and using the sensed frequency to control the rotational speed of the media. Claim 1, for example, has been amended to recite: a media having a pattern of reflective and non-reflective regions aligned circularly about a rim of the media or a pattern of magnetic and non-magnetic regions aligned circularly about a rim of the media; sensing a frequency of electromagnetic radiation radiating from the reflective regions of the pattern or from the magnetic regions of the pattern; and controlling, with the sensed frequency, a rotational speed of the media.

Support for the amendments is found in Figs. 1 and 3 and in the Specification at paragraphs 0022, 0036, 0038 and 0040.

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Claim Rejections

All pending claims stand rejected under Section 103 as being obvious over Honda (2002/0191517) and Ishida (6057976) (with other references cited for some of the dependent claims).

Claim 1 as amended is directed to a method of using electromagnetic radiation to sense media speed. The method includes rotating a media having a pattern of reflective and non-reflective regions aligned circularly about a rim of the media or a pattern of magnetic and non-magnetic regions aligned circularly about a rim of the media; sensing a frequency of electromagnetic radiation radiating from the reflective regions of the pattern or from the magnetic regions of the pattern; and controlling, with the sensed frequency, a rotational speed of the media. The other independent claims, Claims 13, 26 and 39, recite similar limitations.

The cited references do not teach or suggest all the limitations of amended Claim 1. Ishida, which appears to be the closest reference, teaches determining the rotational speed of disk media by sensing the frequency of the Doppler pulses generated from diffused light reflected off a spinning disk -- a so-called Doppler speedometer. See generally, Ishida Figs. 7-16 and the accompanying text at columns 8-15. Ishida also teaches the use of an index signal or "rotation reference signal" for counting the Doppler signal pulses for one revolution. The index signal is generated by detecting an "index mark 18" formed on a "detection ring 16" on the disk. Ishida Figs. 11(b) and 16(b). Index marks 18 in Ishida have a "diffusion reflectance different from that of the disk 1 ...." Ishida column 11, lines 45-48.

Detection ring 16 is not formed on either the inner rim or the outer rim of the disk, as recited in Claim 1. Moreover, to the extent index marks 18 might be deemed a pattern of reflective and non-reflective regions as claimed, there is no indication in Ishida that the frequency of light reflected off either the marks 18 or the surface of the disk in between the marks 18 is sensed. In any event, index marks 18 are not used to determine or control the rotational speed of the disk. The Doppler signals are used to determine and control the speed of the disk. The index marks (and the corresponding index signals) are used in conjunction with the Doppler signals to "determine angular information." See Ishida column 11, lines 29-53 and column 15, lines 58-64.

For all of these reasons, Claims 1, 13, 26 and 39 along with their respective dependent claims distinguish patentably over the cited references.

The foregoing is believed to be a complete response to the pending Office Action.

Respectfully submitted,  
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## OKUYAMA &amp; CO.

## PATENTS AND TRADEMARKS

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Intellectual Property Administration  
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March 3, 2006

Re: Japanese Patent Application No. 2005-518237 ✓  
in the name of Hewlett-Packard Development Company, L.P.  
Your Ref. 200310345-05 ✓ Ref. 17-108 ✓

Dear Sirs,

In the above-identified application, we are enclosing a copy of an English translation of the Office Action, references cited by the Examiner (with a confirmation of this letter), proposal of claim amendments, and our comments.

The response to the Office Action should be submitted before April 20, 2006 ✓  
The term can be extended by another three months if a request for extension is filed before the due date.

We would appreciate to have your instructions well in time before the above due date.

If you have any questions or comments, please do not hesitate to let us know.

Very truly yours,

  
Shoichi OKUYAMA

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COMMENTS BY OKUYAMA & CO.

J7-108

We have received an Office Action against the present application.

also

For your convenience, we shall briefly explain References 5 and 6, as they do not have an English abstract by JPD. Reference 5 discloses a disk drive system which controls a disk rotary speed to be in constant rate. The system provides slits (the code "S" in Fig.1) which do not form magnetism layers, and receives alternately a stronger reflection from slits and a weaker reflection from a magnetism layer which is in some part other than the slits on the disk in order to detect the disk rotary speed.

Reference 6 discloses a device for a rotation control of an optical disk and a driving motor. The device provides markers for detecting a disk rotary speed (the numeral "2" in Fig.1) which consist of grooves reflecting a light for the detection, holes allowing passage of the light or reflective coats changing a reflectance and so on. The number of rotations of the disk is detected as the number of markers passing per unit time.

we

If you have any questions, please contact us.

NO. 6646 P. 2/31

OKUYAMA &amp; CO. +81-3-3588-1337

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